

EXPRESS MAIL LABEL NO. EV314044225US

DATED: 28 JANUARY 2004

ATTORNEY DOCKET: RBUS 1309-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of Inventor:  
**Craig E. Hampel et al.**

Application No. \_\_\_\_\_

Filed: 28 January 2004 (herewith)

Title: **Periodic Calibration for  
Communication Channels by Drift  
Tracking**

Group Art Unit: unknown  
Examiner: unknown

**CUSTOMER NO. 38342**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.56**

Sir:

It is requested that the information identified in this statement be considered by the Examiner and made of record in the above-identified application. This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, material to patentability as defined in 37 C.F.R. 1.56.

Enclosed with this statement is a Form PTO-SB/08. The Examiner is requested to initial the form and return it to the undersigned in accordance with M.P.E.P. 609.

Also enclosed with this statement is a copy of each cited document as required by 37 C.F.R. 1.98. The exception to this, in accordance with the 05 August 2003 Official Gazette Notice in which the USPTO waives the requirement for submitting copies of U.S. Patent and Publications for cases filed after 30 June 2003, is that copies of U.S. Patent documents and copies of U.S. Patent publications are not being submitted.

This statement should be considered under 37 C.F.R. 1.97(b) because it is being filed within three months of the filing date of an application other than a continued prosecution application under 37 C.F.R. 1.53(d).

**Fee Authorization.** The Commissioner is hereby authorized to charge underpayment of any additional fees or credit any overpayment associated with this communication to Deposit Account No. 50-0869 (RBUS 1309-1). A copy of this authorization is enclosed.

Respectfully submitted,

HAYNES BEFFEL & WOLFELD LLP

Date: 28 Jan 04

By:   
Mark A. Haynes, Reg. No. 30,846

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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete If Known</b>		
			Application Number		
			Filing Date		
			First Named Inventor		
			Group Art Unit		
			Examiner Name		
			Attorney Docket Number		
Sheet	1	of	4	RBUS 1309-1	

U.S. PATENT DOCUMENTS						
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	A1	4,384,354		Crawford et al.	05/17/1983	
	A2	5,122,978		Merrill	06/16/1992	
	A3	5,436,908		Fluker et al.	07/25/1995	
	A4	5,859,881		Ferraiolo et al.	01/12/1999	
	A5	6,047,346		Lau et al.	04/04/2000	
	A6	6,219,384		Kliza et al.	04/17/2001	
	A7	6,282,210		Rapport et al.	08/28/2001	
	A8	6,359,931		Perino et al.	03/19/2002	
	A9	6,396,329		Zerbe	05/28/2002	
	A10	6,442,644		Gustavson et al.	08/27/2002	
	A11	6,448,815		Talbot et al.	09/10/2002	
	A12	6,463,392		Nygaard et al.	10/08/2002	
	A13	6,469,555		Lau et al.	10/22/2002	
	A14	6,473,439		Zerbe et al.	10/29/2002	
	A15	6,510,503		Gillingham et al.	01/21/2003	
	A16	6,539,072		Donnelly et al.	03/25/2003	
	A17	6,556,934		Higashide	04/29/2003	
	A18	6,643,787		Zerbe et al.	11/04/2003	
	A19	2003/0026399		Carlson	02/06/2003	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (If known)				
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**C mplete If Known**

<b>Application Number</b>	
<b>Filing Date</b>	28 January 2004 (Herewith)
<b>First Named Inventor</b>	Craig E. Hampel
<b>Group Art Unit</b>	
<b>Examiner Name</b>	
<b>Attorney Docket Number</b>	RBUS 1309-1

*(use as many sheets as necessary)*

Sheet 2 of 4

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (If known)				
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		Application Number			
		Filing Date		28 January 2004 (Herewith)	
		First Named Inventor		Craig E. Hampel	
		Group Art Unit			
		Examiner Name			
Sheet		3		of 4	
		Attorney Docket Number		RBUS 1309-1	

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Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C1	PARIS, LLUIS ET AL, "WP 24.3 A 800MB/s 72Mb SDRAM with Digitally-Calibrated DLL," IEEE International Solid-State Circuits Conference (1999), 13 pages.	
	C2	NAKASE, YASUNOBU ET AL, "Source-Synchronization and Timing Vernier Techniques for 1.2-GB/s SDRAM Interface," IEEE Journal of Solid-State Circuits, Vol. 34, No. 4 (Apr. 1999), 494-501.	
	C3	GILLINGHAM, PETER, "SLDRAM Architectural and Functional Overview," SDRAM Consortium (29 Aug 1997), 1-14.	
	C4	"Draft Standard for a High-Speed Memory Interface (SyncLink)", Draft 0.99 IEEE P1596.7-199X (1996), 56 pages	
	C5	GILLINGHAM, PETER, "SLDRAM: High-Performance, Open-Standard Memory," IEEE (1997), 29-39	
	C6	SLDRAM Inc., "400 Mb/s/pin SDRAM," Draft Advance (9 Jul 1998), 1-69.	
	C7	ZERBE, JARED ET AL., U.S. Patent Application No. 09/776,550 filed 2 February 2001, entitled "Method and Apparatus for Evaluating and Calibrating a Signaling System."	
	C8	ZERBE, JARED ET AL, U.S. Patent Application No. 09/976,170 filed 21 October 2001, entitled "Method and Apparatus for Evaluating and Optimizing a Signaling System."	
	C9	RAMBUS "Direct Rambus Short Channel Layout Guide, Version 0.95" (August 2001) , 40 pages	
	C10	RAMBUS "Direct Rambus Long Channel Design Guide" (2000), 45 pages	
	C11	RAMBUS, INC. "RDRAM Direct Rambus Clock Generator" (April 2002), 22 pages	

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Sheet		4	of	4	Application Number	
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		28 January 2004 (Herewith)	
		Craig E. Hampel	
		RBUS 1309-1	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C12	RDRAM® Overview, "High Performance Memory Interface Solution", Copyright 2003 Rambus, Inc., all rights reserved, 4 pages	
	C13	REDWOOD TECHNOLOGY BRIEF "High Performance Parallel Bus Interface Technology", Copyright 2003 Rambus, Inc., all rights reserved, 2 pages.	
	C14	LEWIS, DAVE, "Easy-to-Use LVDS Serdes for the Serdes Neophyte" National Semiconductor, (16 June 2003), pp. 1-5.	
	C15	INTEL "How to Measure RDRAM* System Clock Jitter" Application Note AP-667 (June 1999), pp. 1-15	

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